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Opera Slam 1891

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POCOCK & *another's* COMPLETE SPECIFICATION.

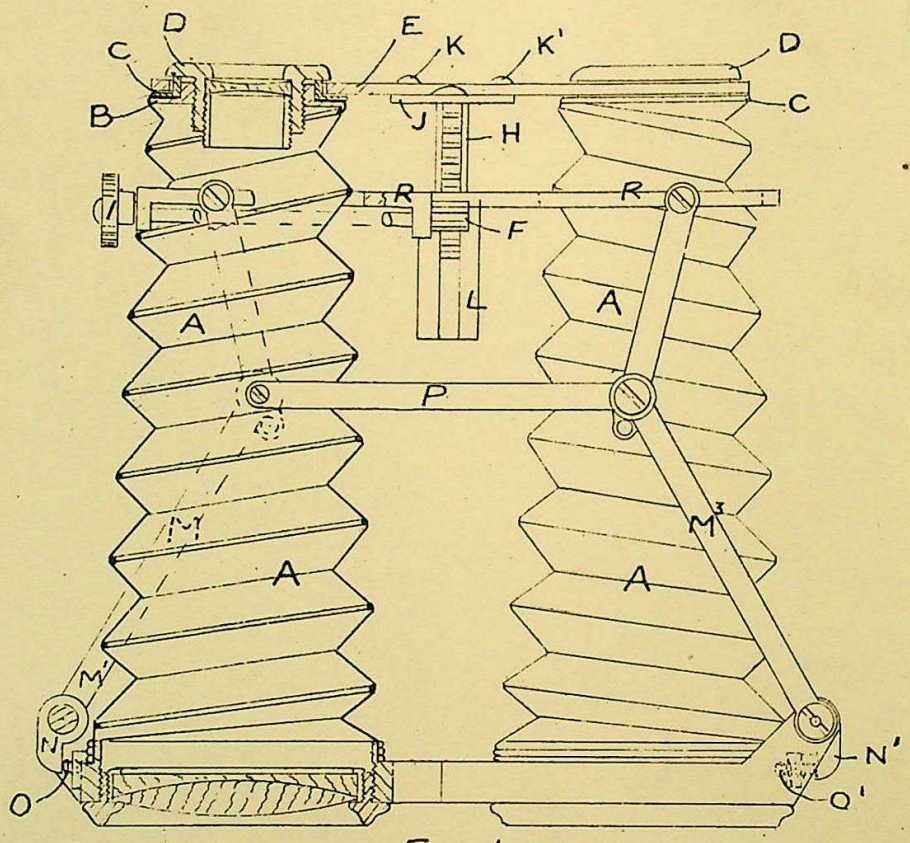

FIG. 1

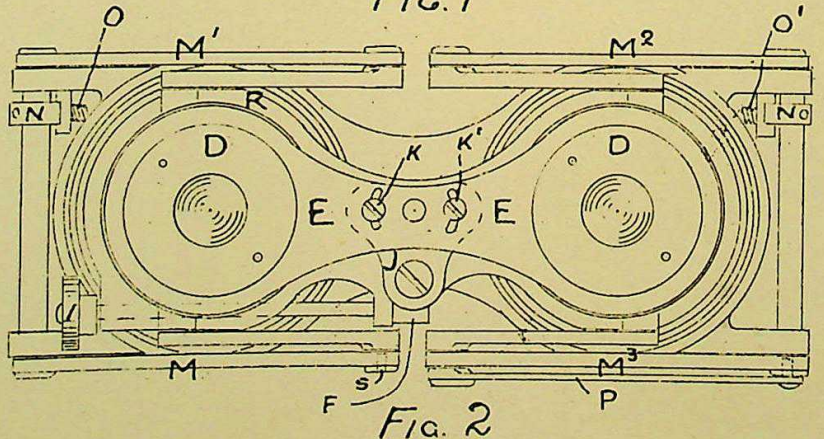

FIG. 2

[This Drawing is a reproduction of the Original on a reduced scale.]

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359/408

Opera Glass

N° 5922 A.D. 1891

2 3

Date of Application, 7th Apr., 1891
Complete Specification Left, 6th Feb., 1892—Accepted, 26th Mar., 1892

PROVISIONAL SPECIFICATION.

Improvements in Collapsable Opera, Field, and such like Glasses.

I, CAROLINE SPILSBURY POCOCK of No. 2 The Elms, St. Ann's Hill Wandsworth, Gentlewoman and I, ALFRED WILLMER POCOCK of No. 2 The Elms St. Ann's Hill Wandsworth Engineer do hereby declare the nature of this invention to be as follows :—

1. Making the flexible portions of the bodies of collapsible opera, field and such like glasses of a corrugated or bellows like form with the corrugations parallel to each other and at right angles to the axis of the body, each corrugation having a ring of wire inside to retain the shape.

2. Making the flexible portions of the bodies aforesaid of a corrugated form such corrugations forming a continuous spiral or screw around the axis of the body and having inside a continuous spiral wire to retain the shape, which wire may or may not act as a spring to extend the glasses.

3. Making a swivel connection of one or both ends of the flexible portions of the bodies aforesaid to the plates of the frames of the glasses when the spiral form aforesaid is used so as to admit of the necessary turning movement caused by such spiral form on opening and closing the glasses.

4. Attaching to the top plate of such glasses which carries the eye lenses a spindle having a rack cut on it which rack gears with a pinion carried on a middle plate and which spindle works in a tube attached to the middle plate, such parts being used for adjusting the focus of the glasses.

5. Making this spindle work in a tube which also has a rack cut upon it for part of its length which said tube works in the aforesaid tube attached to the middle plate and which tube has a moveable stop in it which regulates the movements of the spindle and rackwork tube when worked by the aforesaid pinion and which causes the spindle and rackwork tube to open and close in succession when worked upon by the pinion.

6. Attaching the top plate containing the eye lenses to the focussing spindle by one or more small screws which pass through a slotted hole or holes in this plate and screw into another plate securely attached to the spindle, thus admitting of the adjustment of the eye lenses to the object lenses at any time. The slotted holes may be made in the plate attached to the spindle & the screws screwed with the top plate.

7. Making the stops upon the arms of the frames of collapsible opera & such like glasses or some of them to abut against adjustable screws working in fixed portions of the frames so that the stops can at any time be readily adjusted by means of these screws.

8. Applying to the arms or other portions of the frames one or more stretcher bars for the purpose of fixing the glasses open & so making them more rigid when in use.

9. Attaching the flexible parts of the bodies direct to the top and bottom plates of the frames and allowing them to pass freely through the middle plate.

Dated this 6th day of April 1891.

CAROLINE SPILSBURY POCOCK.
ALFD. WILLMER POCOCK.

[Price 8d.]

COMPLETE SPECIFICATION.

Improvements in Collapsable Opera, Field, and such like Glasses.

I, CAROLINE SPILSBURY POCOCK of No. 2 The Elms St. Ann's Hill Wandsworth Surrey Gentlewoman and, I, ALFRED WILLMER POCOCK of the same address, Engineer do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

Our invention consists in

1. Making the flexible portions of the bodies of collapsible opera field and such like glasses of a corrugated or bellows like form with the corrugations parallel to each other and at right angles to the axis of the body, each corrugation having a ring of wire inside it to retain its shape.

2. Making the flexible portions aforesaid of a corrugated form, such corrugations forming a continuous spiral or screw around the axis of the body and having inside a wire to retain the shape, such wire being also a continuous spiral and which wire may or may not act as a spring to extend the glasses.

3. Making a swivel connection of one or both ends of the flexible portions of the bodies aforesaid to the plates of the frames of the glasses when the spiral form is used so as to admit of the necessary turning movement caused by such spiral form on opening and closing the glasses.

4. Attaching to the top plate of such glasses which carries the eye lenses a spindle having a rack cut upon it which rack gears with a pinion carried on a middle plate & which spindle works in a tube attached to the middle plate, such parts being used for adjusting the focus of the glasses.

5. Attaching the top plate containing the eye lenses in collapsible opera field & such like glasses to the focussing spindle by one or more small screws which pass through a slotted hole or slotted holes in this plate and screw into another plate which is securely attached to the spindle, thus permitting of the adjustment of the eye lenses to the object lenses as to collimation at any time. These slotted holes may be made in the plate attached to the spindle and the screws screwed into the top plate.

6. Making the stops upon the arms of the frames of collapsible opera, field & such like glasses or some of them to abut against adjustable screws working in fixed portions of the frames so that the stops can at any time be readily adjusted by means of these screws.

7. Applying to the arms or other portions of the frames of collapsible opera, field & such like glasses one or more stretcher bars for the purpose of fixing the glasses open & so making them more rigid when in use.

8. Attaching the flexible portions of the bodies of collapsible opera, field & such like glasses to the top and bottom plates of the frames and allowing them to pass freely through the middle plate.

And in order that our said invention may be particularly described and explained reference is made to the accompanying drawings in which similar letters of reference indicate like parts and in which drawings the application of our invention to collapsible opera field & like glasses is illustrated.

Fig. 1. is a half elevation and half sectional view of an opera glass fully extended.

Fig. 2. is a plan of same glass closed.

A. A. are the flexible portions of the body which by preference we make of leather, made in the spiral form and having a spiral wire inside to retain their shape. This wire may or may not act as a spring to keep the glasses extended.

In the case illustrated the flexible parts are securely attached to the bottom plate of the glasses but are attached to the top plate by a swivel joint so as to admit of the partial turning round of this flexible part on the opening and closing of the glasses.

The mode of fixing is as follows, *viz.*, B is a flanged collar screwed on the inside to fit the outside of the tube of the cell D. C is another flanged collar bored to fit on the plain neck of the collar B. E is the top plate of the glasses which carries the eye pieces and in which openings are made sufficiently large for the necks or pipes of the collars C to turn in. The neck or pipe of the collar B is somewhat shorter than the length of the collar C and the neck or pipe of this collar C is somewhat longer than the thickness of the plate E. The flexible material of the body which is shown by a strong black line in the section, is turned over upon the flange of the collar B. The collar C is then placed over the neck of the collar B. The plate E being now placed upon the collar C the cell D is tightly screwed into B thus clamping up the flexible material between the flanges of B and C but allowing sufficient play for the whole to turn in the plate E.

For the focussing adjustment H is a spindle having a rack cut upon it and working in the tube L. This rack is moved by the pinion F which gears into it, the pinion being moved by the user of the instrument by the milled head I.

For adjusting the eye lenses in collimation with the objective lenses the plate E is fastened to the plate J by screws K, K^1 passing through slots in E and screwing into J. The plate J is securely attached to the spindle H.

In order that the instrument may be rigid when open the various arms are provided with stop pieces to abut against certain portions of the frame. Instead of letting these stops abut directly against the frame we screw into that part of the frame against which the stop would abut a screw for the stop to abut against and by screwing this screw in or out in its seating the position of the stop can be readily adjusted.

In the case illustrated N. N^1 are stops on the spindles carrying the lower arms M. M^1 M^2 M^3 and these stops abut when the glass is open against the adjustable screws O. O^1 in the bottom plate of the frame.

P is the stretcher bar attached to the arm M^3 and is provided with a projecting pin at its free end which, when the glass is open is inserted into the hole S in the joint of the arm M. When the glass is closed this bar is laid along the arm M^3, the projecting pin being inserted in a hole at the lower end of that arm.

The flexible portions of the bodies are attached to the top and bottom plates and pass freely through the middle plate R.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed we declare that what we claim is :

1. Making the flexible portions of the bodies of collapsible opera field & such like glasses of a corrugated or bellows like form having the corrugations parallel to each other and at right angles to the axis of the body and having a ring of wire inside each corrugation to retain it in shape.

2. Making the flexible portions aforesaid of a corrugated form, such corrugations forming a continuous spiral or screw around the axis of the body and having inside a wire to retain the shape, such wire being also a continuous spiral and which wire may or may not act as a spring to extend the glasses.

3. Making a swivel connection of one or both ends of the flexible portions of the bodies aforesaid to the plates of the frames of the glasses.

4. Attaching to the top plate of collapsible opera field & such like glasses a spindle having a rack cut upon it which rack is worked by a pinion for focussing the glasses.

5. Attaching the top plate carrying the eye pieces in collapsible opera, field & such like glasses to the focussing spindle by one or more screws which pass through slotted holes in the top plate and screw into the focussing spindle or a plate securely attached to it.

6. Making the stops upon the arms of the frames of collapsible opera field & like glasses or some of them to abut against adjustable screws in fixed portions of the frame.

7. Applying to the arms or frames of collapsible opera field & such like glasses one or more stretcher bars for fixing the glasses open.

8. Attaching the flexible portions of the bodies of collapsible opera field & like glasses to the top and bottom plates of the frames and allowing them to pass freely through the middle plates.

All substantially as described herein and illustrated by the drawings.

Dated this 5th day of February 1892.

CAROLINE SPILSBURY POCOCK.
ALFD. WILLMER POCOCK.

London : Printed for Her Majesty's Stationery Office, by Darling & Son, Ltd.—1892.